

AMENDMENT TO THE SPECIFICATION

Please amend the paragraph beginning on page 1, line 13 of the specification as follows:

Fig. 8 is a diagram showing the basic structure of an electret condenser microphone. Referring to Fig. 8, a protective cloth 101 is a cloth which is placed for the purpose of preventing dust or the like from entering, and which is configured by a cloth having a high sound transmission property, such as nonwoven cloth. As a fixed electrode 102, used is a metal electrode or an electrode in which a face opposed to a vibrating diaphragm is electroconductive-treated. An electret film 103 is a dielectric film which is disposed on the fixed electrode 102, and generally used by applying FEP (tetrafluoroethylene-hexafluoropropylene) to the fixed electrode 102 by means of thermal fusion. A thin metal film or a plastic film in which one face is electroconductive-treated is used as the vibrating diaphragm 104. The vibrating diaphragm is bonded to a vibrating diaphragm support ring 105. A spacer 106 is disposed so that the vibrating diaphragm and the fixed electrode form and hold a predetermined positional relationship. Circuit components 107 are configured by an FET, a resistor, etc. On a circuit board 108, the circuit components 107 are mounted by soldering or the like, and form a preamplifier which converts a change of an electrostatic capacitance between the vibrating diaphragm and the fixed electrode due to vibration displacement, to an electric signal, and a terminal board and a bottom face plate are configured. A spacer 109 is used for forming a desired space between the fixed electrode 102 and the circuit board 108. As a case 110, used is a metal such as aluminum, or a molded plastic which is electroconductive-treated. A lower end portion of the case is subjected to a caulking process, bonding, or the like, and the case forms a housing and functions also as a shield case.

Please amend the paragraph beginning on page 4, line 1 of the specification as follows:

However, a usual electret condenser microphone does not have thermal resistance against the Pb-free reflow temperature. Fig. 10 shows experimental results in the case where a surface potential was measured when an electrode in which FEP (thickness: 25 μm) is formed as an electret was heated. In Fig. 10, the abscissa indicates the heating temperature (30 sec.), and the abscissa ordinate indicates the surface potential of the electret. Fig. 10 shows that the surface potential, which is -250 V at ordinary temperature, is reduced by about 20% at 200°C, and reduced or eliminated by about 90% at 300°C. The experimental results suggest that a usual ECM cannot cope with Pb-free reflow.

Please amend the paragraph beginning on page 12, line 11 of the specification as follows:

Fig. 4 is a view showing an embodiment of the invention, (a) is a perspective view, and (b) is a section view. Referring to Fig. 4, the material of the coating film 1 which coats the case is polyimide. The electret condenser microphone of the embodiment has: an electret film 4 that is a vibrating diaphragm in which one face is electrically conductive; a fixed electrode 3 which is placed to be opposed to the electret film 4 via an air layer; a spacer 7 which is placed ~~placed~~ so as to form and hold a predetermined positional relationship between the electret film 4 and the fixed electrode 3; and a spacer 12 which forms a space between the fixed electrode 3 and a circuit board 9 constituting the circuit means. The microphone is incorporated in the metallic case 11 so that only a wiring pattern 10 serving as external connecting means is exposed. A protective cloth 2 is formed on the case 11 coated by the coating film 1 in this way, and the fixed electrode 3, the electret film 4, a vibrating diaphragm 5, a vibrating diaphragm support ring 6, the spacer 7, and circuit components 8 configured by an FET, a resistor, and the like are accommodated in the case, and fixed onto the circuit board 9. The wiring pattern which is disposed on the circuit

board 9, and which is used for connecting with another board is 10, and connected with the other board by soldering in the reflow process. The spacer 12 forms a desired space between the fixed electrode 3 and the circuit board 9.

Please amend the paragraph beginning on page 19, line 10 of the specification as follows:

According to experiments conducted by the inventor, in the case of a structure in which a silicon oxide film is formed as an electret while being exposed, electrified charges escaped for several hours to several tens of hours even when the structure was allowed to stand at ordinary temperature. However, it was found that deterioration of electrification can be prevented from occurring by thoroughly coating a silicon oxide film by another insulating film (in the example, the silicon nitride film 15).